

Date: Friday, 13/02/2009 1:02:38 PM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : HINGE
Job Number : 45796	
Estimate Number : 13558	
P.O. Number :	Part Number : D38133
This Issue : 13/02/2009 S.O. No. :	Drawing Number : D3813 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : MACHINED PARTS	Drawing Revision : A
Previous Run : 42053	Material :
Written By :	Due Date : 20/02/2009 Qty: 12 Um: Each
Checked & Approved By : <u>JUL 09.02.13</u>	
Comment : Est Rev:A New Issue 08-09-03 JLM Verified By:EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M6061T6B0750X03000	6061-T6 Bar .750 x 3.00
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Comment: Qty.: 0.5040 f(s)/Unit Total : 6.0480 f(s)

6061-T6 Bar .750 x 3.00

BATCH: M104741

DIP 09/02/14 (12)

2.0	BAND SAW	BAND SAW
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Comment: BAND SAW

Cut blank 5.725 " long

DIP 09/02/14 (12)

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

1- Mill as per Folio FA778 Rev: AA & Dwg D3813 Rev: A

2-Deburr per dwg D3813

3-Finish tapping hole to final depth as per Dwg D3813

J.F. / DIP 09/02/15

(12)

(PTC)

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.F. / DIP 09/02/19

(12)

5.0	QC8	SECOND CHECK
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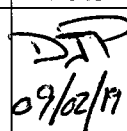
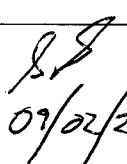

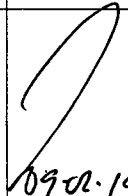
Comment: SECOND CHECK

SF 09/02/21 (12)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3813-3 PAR #: N/A Fault Category: Prod / Machine PAB NCR: (Yes) No DQA: D Date: 09/03/03
D3813-043 D130-780-011
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: D Date: 09/03/03

NCR: <u>45796</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
090219	3.0	1 part scrap. 0.06" drill bit broke inside the part & cannot be removed. R. C. tool/process		Scrap & replace qty 1 B <u>104741</u>	 09/02/19	 09/02/21		 090219

NOTE: Date & initial all entries

Date: Friday, 13/02/2009 1:02:38 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HINGE

Job Number: 45796

Part Number: D38133

Job Number:



Seq. #: Machine Or Operation: Description :

6.0 HAND FINISHING1 HAND FINISHING RESOURCE #1



(12)

Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

FL 09/02/23

7.0 POWDER COATING POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

MASK THREADED HOLE PRIOR TO POWDER COAT

START TIME: 10:00AM

OVEN TEMPERATURE: 320°F

FINISH TIME: 10:30AM

91

09-02-24

(12)

8.0 QC3 INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FL 09-02-24

(12)

9.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

09/2/25 (12)

10.0 QC21 FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/02/25

Job Completion



09/02/25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 45796
Description: Hinge		Part Number: 3813-3
Inspection Dwg: 3813	Rev: A	Page 1 of 1

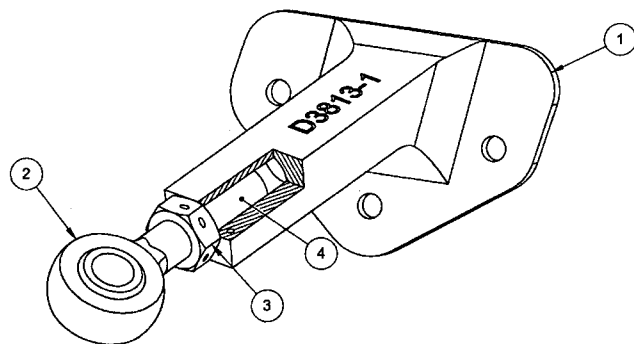
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.28"	±.030"	.280"	✓			
.56"	±.030"	.560"	✓			
.28"	±.030"	.290"	✓			
5.22"	±.030"	5.215"	✓			
R0.13"	±.030"	R0.125"	✓			2 PL
2.50"	±.030"	2.498"	✓			
.25"	±.030"	.246"	✓			
1.25 Dp	±.030"	1.222"	✓			
.69"	±.030"	.691"	✓			
.13"	±.030"	.139"	✓			
.09"	±.030"	.099"	✓			
Ø.060"	±	Ø.060"	✓			THRU
R0.25"	±.030"	R.250"	✓			
1.82"	±.030"	1.838"	✓			
1.40"	±.030"	1.400"	✓			
85°	± 1/2°	85°	✓			

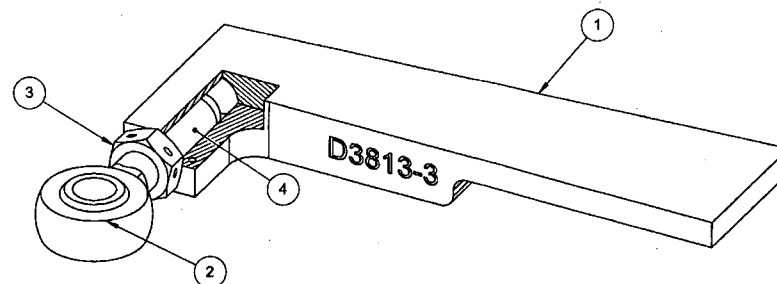
Measured by: J.F.	Audited by: SP	Prototype Approval:	N/A
Date: 09/02/18	Date: 09/02/21	Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	



ITEM NO.	PART NUMBER	DESCRIPTION	QTY. -041
1	D3813-1	HINGE, UPPER DOOR	1
2	D3518-3	BALL JOINT ROD END	1
3	NAS509-6	NUT	1
4	MS124738	HELI-COIL, 3/8-24 UNF	1

D3813-041 HINGE ASSY, UPPER DOOR



ITEM NO.	PART NUMBER	DESCRIPTION	QTY. -043
1	D3813-3	HINGE, LOWER DOOR	1
2	D3518-3	BALL JOINT ROD END	1
3	NAS509-6	NUT	1
4	MS124738	HELI-COIL, 3/8-24 UNF	1

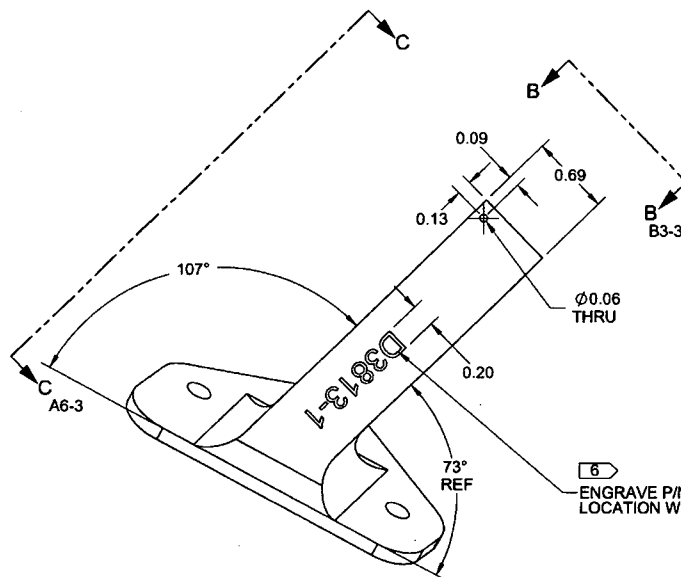
D3813-043 HINGE ASSY, LOWER DOOR

RELEASED
04/01/13

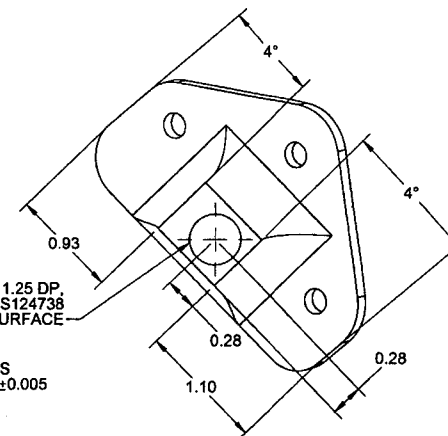
NO 45790
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A	NEW ISSUE		08.11.10
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.11.10		

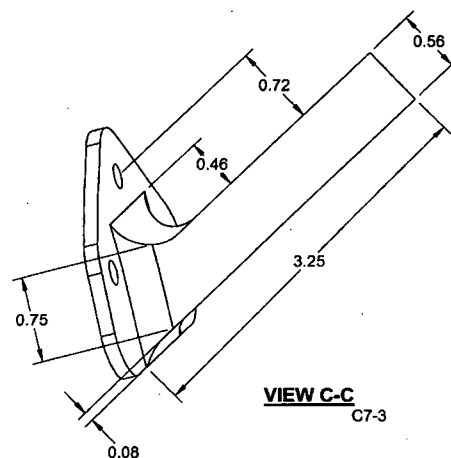
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3813	REV. A SHEET 1 OF 4
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VIEW A-A
C4-2



VIEW B-B
D5-3



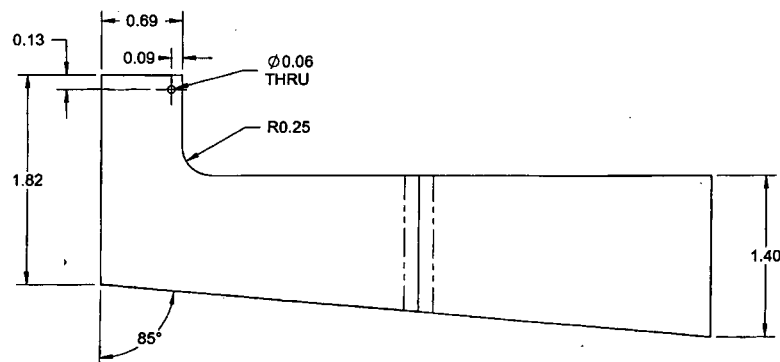
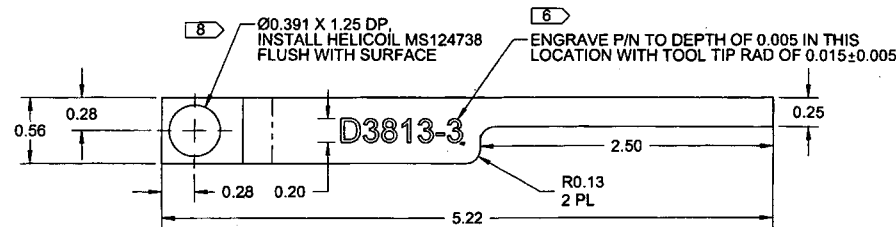
VIEW C-C
C7-3

D3813-1 HINGE, UPPER DOOR

RELEASED
09/01/13

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D3813-3 HINGE, LOWER DOOR

RELEASED
09/07/13 MDD

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) PER AMS-QQ-A-200/8 (OR AMS 4160), (REF. DART SPEC. M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT "WHITE GLOSS" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.020 TO 0.030 MAX
- 6) IDENTIFICATION: ENGRAVE P/N AS SHOWN
- 7) WEIGHT: 0.24 lbs
- 8) MASK HOLE PRIOR TO POWDER COAT

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CHECKED		DRAWING NO. D3813
MFG. APPR.		REV. A
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DATE	08.11.10	SCALE NTS

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